

**DEA UK-RN-N-96-5922**  
**Notes and Action Item Status at 18 Mar 04**

Action	Description	POC & Remarks
A-01-06	<p>US to present or provide Flextron testing/modeling results for adequacy and use in HF ground planes. Also US to address SE degradation of Flextron material due to hole(s), repairs, and compromises.</p> <p>Questions raised by UK on how much damage can be done (in holes and repairs) before the SE degrades or ground plane diminishes. What is the connection method used to carry RF to shielded spaces?</p> <p><b>Sep 03 Stan George produced a paper on modelling screening effectiveness of drilling holes in ground planes. Ron Bradley to copy electronic version to Keith Tench for onward transmission to DSTL.</b></p>	<p>Stan George</p> <p>Stan George to send Flextron report.</p> <p><b>Ron Bradley</b></p>
A-02-01	<p>US to forward MIL-STD-464 to Geoff Nixon.</p> <p><b>Sep 03 Ron Bradley provided Geoff Nixon with Mil Std 464. Also available on DoD website.</b></p>	<p>Completed</p> <p>Completed</p>
A-02-02	<p>Bob Needy and Ken Carrigan to review RADHAZ criteria limit studies provided by James MacKay UK.</p> <p><b>Sep 03 Bob Needy to review Radhaz studies – Ongoing</b></p> <p><b>Mar 04 On advice of a Andy Hunt over taken by events – UK to adopt ICNIRP.</b></p>	<p>Bob Needy Ken Carrigan</p> <p>Closed</p>
A-02-03	<p>Neal Stetson and Dan Tam to review and comment on Def-Stan-1049.</p> <p><b>Sep 03 Overtaken by events - NES 1049 was superseded by Def Stan 08-136 Parts 1 &amp; 2. New Action A-03-02</b></p>	<p>Neal Stetson Dan Tam</p> <p>Closed</p>
A-02-04	<p>Rick Thibeault to review NEC697 and provide a submarine EMC test trial report to UK.</p> <p><b>Sep 03 Rick Thibeault to review NES 697 &amp; provide a sub test trial report to UK. Ongoing.</b></p>	<p>Rick Thibeault to action by 1 Nov 03.</p>
A-02-05	<p>Ken Carrigan to provide a list of all past action items and deliverables though out the past years.</p> <p><b>Sep 03 Ken Carrigan to provide list of open actions. New action J-03-02 on Keith Tench &amp; Ron Bradley to review open actions.</b></p>	<p>Ken Carrigan</p> <p>Completed</p>

A-02-06	<p>USA to provide Geoff Nixon with FCC Part 15 device regulation/requirements (website if possible).</p> <p><b><u>Sep 03</u> Info on the CD and website <a href="http://www.fcc.gov">www.fcc.gov</a>.</b></p>	<p>Ron Bradley</p> <p>Completed</p>
A-02-07	<p>Mike Ryan to provide Geoff Nixon EMI incidences of FCC Part 15 devices.</p> <p><b><u>Sep 03</u> Info on the CD. New action B-03-02 on Pete Waylen to analyse this information.</b></p>	<p>Completed</p>
A-02-08	<p>Mike Mearns or Mike Stewart to provide AESOP presentation at next DEA meeting.</p> <p><b><u>Sep 03</u> Ongoing</b></p>	<p>Mike Stewart Mike Mearns</p> <p>Next DEA</p>
A-02-09	<p>For Tom Ready, or others, to provide VIPER presentation brief at next DEA meeting.</p> <p><b><u>Sep 03</u> Viper presentation on CD</b></p>	<p>Completed</p>
A-02-10	<p>Ron Bradley to provide Geoff Nixon the latest SEMCIP brief and package (video was provided).</p> <p><b><u>Sep 03</u> SEMCIP brief &amp; package copy on CD</b></p>	<p>Completed</p>
A-03-01	<p>US to provide to UK SOBT Interactive courseware CD's a) EMI Awareness ICW Training SOBT ICW EMI-97008; b) EMC Technical refresher course SOBT ICW EMI 99009.</p> <p><b><u>Sep 03</u> CD copy received.</b></p>	<p>Rick Thibeault Keith Lodge Peter Waylen</p> <p>Completed</p>
A-03-02* (ref A-02-03)	<p>Review and Comment on Def Stan 08-136 parts 1 &amp; 2</p>	<p>Neal Stetson Dan Tam Keith Tench</p>
A-03-03	<p>USA to provide brief on paper detailing US assessment of (US HF ambient measurement?) data and any conclusions or recommendations.</p>	<p>Ken Carrigan</p>
A-03-04	<p>USA to provide TRB with a copy of IEE C95-1 (when releasable)</p> <p><b><u>Sep 03</u> Draft not for release.</b></p>	<p>Ron Bradley Andy Hunt</p>
A-03-05	<p>USA to provide a copy of OP3565 Vol 1 Revision 6 for Andy Hunt.</p>	<p>Bob Needy Andy Hunt</p>
A-03-06	<p>USA to provide 2 copies of recent Radhaz HERP survey reports from two US platforms similar to UK ships.</p>	<p>Bob Needy Andy Hunt</p>
A-03-07	<p>USA to provide TRB with copies of all relevant EMP standards / documentation applicable to USA Surface Ships</p>	<p>Neal Stetson Alan Casperd</p>

		By 1 Feb 2004
A-03-08	USA to provide UK with details of how USA subs are EMP protected.	Rick Thibeault Neal Stetson Cameron Blair Peter Waylen
A-03-09	USA to provide details of who in the UK has NEOP Radar  <b><u>Sep 03</u> Data provided.</b>	Neal Stetson  <b>Completed</b>
A-03-10	USA to provide an example of a submarine EMC Test Plan.	Rick Thibeault Keith Tench Peter Waylen
A-03-11	USA to provide TRB with copy of “Notices to Mariners” on GPS issued by US Coast Guard – USCG Advisory #02-01 – file name: “USCG Bullentin on GPS burnout.doc”  <b><u>Feb 04</u></b> Emailed to Keith Tench.	Stan Williams Keith Tench  <b>Completed</b>
A-03-12	USA to provide copy of OD 61988 (fire control?)	Rick Thibeault Keith Tench Peter Waylen
A-03-13	USA to clarify which DEA covers Personnel Radhaz	Ron Bradley Keith Tench
A-03-14	USA to provide report on EMC problems with commercial GPS. ( <b>Provide title: “ Burn-Out, A Rational Requirement...etc..)</b>  <b><u>Sep 03</u> CD provided and forwarded to Dave Toms BAe &amp; Richard Hoad QinetiQ.</b>	Stan Williams Keith Tench  <b>Completed</b>

Action	Description	POC & Remarks
B-00-02	<p>Alan Lavell-Smith and Alistair Race to provide Mike Mearns with U.K. shore site frequency restrictions and any history on interference to shore sites from U.K./U.S. ships. July 2000 due date.</p> <p>Nov '01: Ron has taken action to provide specific details of what is desired. Confliction of radars, communications, etc with Litoral shores mainly.</p> <p>'02 - Mike Mearns has provided specific details of desired data.</p> <p><b><u>Sep 03</u> Site freq restrictions – Ongoing + new action (B-03-10) on UK what restrictions does UK place on USA vessels in UK docks.</b></p>	<p>Alan Lavell-Smith Alistair Race Mike Mearns</p> <p>Ken Carrigan</p>
B-00-03	<p>John Kazik to provide Ken Carrigan with Sub Aperture Antenna modeling in MathCAD. (Subject to TPO review).</p> <p>Nov '01: John has not delivered any modeling software.</p> <p>'02 - The POC has been transferred to Steve and Ed, who will be looking into this action.</p>	<p>Steve Billet Ed Turner</p>
B-00-04	<p>John Kazik to provide Ken Carrigan with MathCAD program designed to show Modal Resonances of EM fields inside structures.</p> <p>Nov '01: John has not delivered any software to date.</p> <p>'02 - The POC has been transferred to Steve and Ed, who will be looking into this action.</p>	<p>Steve Billet Ed Turner</p>
B-01-01	<p>UK present data/presentation on Lightning protection for radar radiation patterns with present SAMPSON Radar configurations. US is very interested on the results for close in metallic conductor(s), a high powered radar, and the resultant radiation pattern degradation.</p> <p>'02 - Alan Johnson spoke with Marconi on this matter. Marconi had optimized the metallic conductors in the design of the radar (Geoff to send a copy of SAMPSON photo's showing lightning conductors.)</p>	Geoff Nixon
B-01-02	<p>Larry Cohen interested in any information with Rotatable MESAR Radar, TR modules, and the required lightning protection associated with it.</p> <p>'02 - On going.</p>	Geoff Nixon

B-01-07	<p>UK to provide latest Low Level Swept RADHAZ Ship Test report to Ron Bradley.</p> <p>Collaboration in a RADHAZ LLS test is scheduled in '02 with NSWC/DD J50 group. J50 to invite UK onto a US Ship for LLS testing.</p> <p>'02 - Plans are ongoing.</p>	Geoff Nixon
B-02-01	<p>UK to forward AECTP500 2nd edition to US for review and Comments</p> <p><b><u>Sep 03</u> UK to provide a copy of the latest draft of AECTP 500 to Ron Bradley who will get someone in USA to review.</b></p> <p><b><u>Dec 03</u> Overtaken by events Steve Tanner has reviewed ed 2 draft 3. TRB will forward draft 4 when issued (Apr ish).</b></p>	<p>Geoff Nixon</p> <p>Keith Tench Ron Bradley</p>
B-02-02	Alan Johnson to provide a presentation on Battle Space Management System at the next DEA meeting.	Alan Johnson
B-02-03	Mike Robinson desires an Electric Drive brief from the UK and any test results (with data) from Land Based Test Site	Geoff Nixon Ben Thorpe
B-02-04	Geoff Nixon to provide Ron Bradley a CD that will contain all past DEA presentations.	Geoff Nixon
B-02-05	<p>Geoff Nixon to provide Ron Bradley a copy of STANAG 4557, Shielding Effectiveness testing.</p> <p><b><u>Mar -03</u> Action passed to Keith Lodge</b></p>	<p>Geoff Nixon</p> <p>Keith Lodge</p>
B-03-01	UK to provide Def-Stan 08-136 parts 1 & 2 to US for review.	Keith Lodge Ron Bradley Neal Stetson Dan Tam
B-03-02	Review FCC part 15 EMI Incidences (A-02-07) and provide feedback to US as to the utility that this information provides and whether or not additional information is desired in FY04.	Pete Waylen
B-03-03	UK to review US HF Ambient measurement data and provide comments on utility of data and any conclusions drawn by UK (ref (J-02-03)).	Keith Tench
B-03-04	<p>UK to provide copy of ACP No 190 &amp; Supplement 1</p> <p><b><u>Sep 03</u> Hard copy of ACP No 190 supplied to Kathy Khalil, copy of Supplement 1 and electronic versions of both still required.</b></p>	Keith Tench Neil Stetson Kathy Khalil Ron Bradley
B-03-06	UK to provide Rick Thibeault copies of the UME Hardening design guide (QinetiQ presentation refers).	TRB QinetiQ to copy them

		to TRB
B-03-07	UK to provide Rick Thibeault with a copy of BS 1597 (1985) - Equip Spec Marine Environment.	Keith Lodge
B-03-08	UK to provide copies of TUV EMC Assessment reports - Hand Held Radios	Peter Waylen By 1 Nov 2003 for Rick Thibeault
B-03-09	UK to provide Ron Bradley with details of EMC Compliance Website “Banana Skins” as a particular instance.	TRB Ron Bradley. <b>Completed ?</b>
B-03-10	What restrictions does UK place on USA vessels in UK docks (Ref J-98-02)?	TRB
B-03-11	UK to provide recipe for Banoffee Pie.	Alison Tench

Action	Description	POC & Remarks
J-97-02	<p>Establish a joint EMI/EMC trial/evaluation on a UK Submarine. (using U.S. Test Procedures)</p> <p>'00 notes: Craig still wants to maintain this but new POC on U.K. side is needed.</p> <p>Nov'01: Mostafa left the MoD. New POC is Geoff Nixon. NES 697 is the only document used for submarines. It is not an EMI Certification. Trials are done by .....?</p> <p><b><u>Sept 03</u> Joint action to arrange clearances to facilitate an exchange visit for UK/US EMC personnel to witness an EMC trial/assessment on board the other nation submarines.</b></p>	<p>Peter Waylen Rick Thibeault</p>
J-98-02	<p>For U.S. and U.K. to bring in issues of Joint interoperability issues. Left open as Joe indicates this is the way NAVSEA is now operating.</p> <p>Nov '01: Leave Open. UK has much experience in land RF Links and connectivity. USA is VERY interested in any presentations on this topic.</p> <p><b><u>Sep 03</u> Joint interoperability issues – Ongoing New action on UK (B-03-10) – restrictions on USA vessels in UK docks?</b></p>	<p>Geoff Nixon</p> <p>Ron Bradley Keith Tench</p>
J-02-01	<p>US &amp; UK to brief on new platform mast designs, to include IVUL and UK's 3rd mast. This action deals with applied research in the tools available to model the latest Ship Mast and Platform composite designs.</p>	<p>Neal Stetson Ron Bradley Geoff Nixon Steve Billet</p>
J-02-02	<p>UK (Geoff Nixon) and US (Mike Stewart) to provide presentations on Joint harmonization of E3 standards (including NATO) at the DoD E3 conference and next DEA meeting.</p> <p><b><u>Sep 03</u> Joint harmonisation of E3 Stds presentation completed at DoD (AECTP 500).</b></p>	<p>Mike Stewart</p> <p>Keep action open</p>
J-02-03	<p>For the UK and US to share HF Ambient measurement data (emissions) taken aboard GRP vessels, with and without systems turned on.</p> <p><b><u>Sep 03</u> USA HF Ambient data on CD. UK to check if similar UK data exists. Also new action (B-03-03) on UK to review the data.</b></p>	<p>Keith Tench Ken Carrigan</p> <p>USA data supplied</p>
J-03-01	<p>UK/US to exchange submarine EMI/EMC organizational charts</p>	<p>Rick Thibeault Ron Bradley Peter Waylen</p>

J-03-02	Review past action items and delivery list and provide recommended disposition for any open or unclear actions to bring to closure.	Keith Tench Ron Bradley Ken Carrigan
J-03-03	Joint UK/USA Radhaz survey. USA measurement method to be applied to UK vessel previously surveyed using LLS.	Bob Needy Matt Goodwin
J-03-04	UK to provide both raw measured HERP data and a report of a low level sweep survey. USA to review what it would do with the raw data.	Matt Goodwin Bob Needy
J-03-05	UK/USA to conduct a feasibility study for a 3 month exchange visit  <b><u>Mar 04</u> Potential UK and USA exchange personnel identified – feasibility to be confirmed at DoD.</b>	Alex Thompson Stan Williams Mat Goodwin By 1 Feb 04



Closing statement

The intention is to hold DEA 2004 in San Diego California where it is hoped that the following can be arranged:

- Tour of USA submarine
- Antenna model range (Dan Tan)
- Ship with current probe
- Tour of a surface ship